

REMARKS

Claims 18-41 are pending. Claims 18-41 stand rejected under 35 USC § 103(a). Applicant appreciates the interview to clarify the rejections with respect to the claims and the claims although no agreement was reached. Applicant respectfully traverses the rejections with respect to the claims 18-41 with the following remarks.

Request for Interview

Applicant respectfully requests an interview with examiner to discuss the amendments to the claims in light of the final rejections.

Amendments to Claims

Per our discussions in the interview, claims 18, 25, and 36 are amended to add the definition of the term “link” to the claims to avoid the broad construction of that term by examiner. Also, Applicant amended claims 25 and 36 to include call out numbers to provide example correlations between claim elements and figure elements. Amendments do not add new matter.

Replacement Drawing

Replacement drawings add callouts for the “medium” for data transmission between write port 130 and read port 150, the “medium” for data transmission between write port 160 and processor card 170. Also, the replacement sheet adds a call out for the route (or path) 102 as described in paragraphs 23 and 27 of the specification.

Fung in view of Zeitler

Claims 18-22, 24-26, 29-32, and 34-41 stand rejected under 35 USC § 103(a) as being unpatentable by Fung U.S. Pat. App. 2003/0196126 (hereinafter “Fung”) in view of Zeitler et al. U.S. Pat. App. 2004/0153507 (hereinafter “Zeitler”). Applicant respectfully traverses the rejections with the following remarks.

To establish a prima facie case of obviousness, the modification or combination must teach or suggest all of Applicants' claim limitations.¹

Independent Claim 18

With regards to claim 18, the combination of Fung and Zeitler does not teach or suggest "...communicating the power mode to the multiple links to configure circuitry associated with the multiple links to process the data transmission[, wherein each of the multiple links comprise a transmitter communicatively coupled with a receiver via a data transmission medium]."

The Office action draws equivalencies between elements of claim 18 and the cited references, which contradict the language of claim 18, to form the basis for the rejection. For instance, the Office action implies an equivalency between "multiple links" in claim 18 and "multiple servers" in Fung. The amendments of claim 18 explicitly add the definition that "each of the multiple links comprise a transmitter communicatively coupled with a receiver via a data transmission medium." Fung describes the multiple-servers as "a plurality of servers, including their CPU, hard disk drive, power supply, cooling fans, and any other circuits or peripherals that are associated with the server."² "Server modules are operative to serve data or other content in a manner that is well known in the art and not described in greater detail here."³

Furthermore, the equivalencies rely, in part, on the obviousness of application of the power modes Fung describes in connection with servers to links but Fung does not apply the power modes to links described in Fung. Fung describes switching fabric (switch modules) in FIG. 6 at elements 104a-1, 104a-2, 104b-1, and 104b-2 and does not teach or suggest implementation of power modes for those links.

The present application clearly describes "links" as transmitter and receiver pairs including the communications medium therebetween.⁴ Claim 18 defines the "multiple links" as being "between an origin and a destination of a data transmission..." Claim 18 also describes "...a channel of the multiple links..." Consistent with this interpretation, Fung states that

¹ *In re Royka*, 490 F.2d 981, 985, 180 USPQ 580, 583 (CCPA 1974).

² Fung, par. 10, first sent.

³ Fung, par. 65, second sent.; *See generally*, pars. 65-66.

⁴ Specification, pg. 1, par. 2, last sent. "Communication systems also include links, each having a transmitter, a medium, and a receiver, to transmit the data in response to those high-level decisions."; *see also* Figs. 1 and 2.

“[s]erver modules are operative to serve data or other content in a manner that is well known in the art....”⁵ Fung does not describe the servers as links for a data transmission.

The lack of equivalency is obvious if one were to substitute “multiple servers” into the preamble of claim 18. In other words, Fung does not teach or suggest a “method for reducing power consumption by *multiple servers* between an origin and a destination for a data transmission” because Fung does not teach or suggest interconnecting “multiple servers” to propagate a data transmission from an origin to a destination.

Fung describes changing the servers’ power modes based upon the loads on the servers.⁶ Fung does not describe changing link power modes based upon data transmission characteristics of a data transmission. And, Fung does not teach or suggest “communicating the power mode to the multiple links [between an origin and a destination for a data transmission] to process the data transmission” between an origin and a destination.

Zeitler fails to compensate for the inadequacies of Fung in supporting the rejection of claim 18. Zeitler “...generally relates to distributing system management signals in a computer system [and] ...[m]ore specifically [to] ...techniques for distributing system management signals precisely to designated resources, such as the resources in a partition.”⁷ Zeitler does not teach or suggest “communicating the power mode to the multiple links [between an origin and a destination for a data transmission] to process the data transmission.” For instance, Zeitler does not teach or suggest power modes for links. Thus, Applicant respectfully traverses the rejection of claim 18 and requests that the rejection be withdrawn.

Independent Claim 25

With regards to claim 25, the combination of Fung and Zeitler does not teach or suggest two ports (a first port and a second port) that receive a control signal that configures the first port to operate in a first power mode and the second port to operate in a second power mode based upon a characteristic of the data transmission to retransmit the data transmission.

The Office action refers to the rejection of claim 18 as the basis for claim 25. The Office action further states that each of the servers comprise “input/output ports” and:

⁵ Fung, par. 65, second sent.; emphasis added.

⁶ Fung, pars. 155-157.

...it is clear that Fung would teach a first port ...comprising a first link circuit to couple to the first device (a first server) and a second port ...comprising a second link circuit to couple to the second device (a second server) ... and would teach global controller and local controller....

Fung does not teach or suggest two ports having capabilities to receive the control signal and in response thereto, to configure to operate in particular power modes. And, Fung does not teach or suggest multiple power modes for link circuits of ports.

Zeitler fails to compensate for the inadequacies of Fung. For instance, Zeitler does not teach or suggest power modes for links and Zeitler does not teach or suggest link circuits to reconfigure links in response to a control signal. Thus, Applicant respectfully traverses the rejection of claim 25 and requests that the rejection be withdrawn.

Independent Claim 36

With regards to claim 36, the combination of Fung and Zeitler does not teach or suggest “a global link circuit... to transmit a control signal to ports... to configure link circuits of the ports[, each of the multiple links to comprise a first port with a transmitter communicatively coupled with a receiver of a second port via a data transmission medium].”

Fung does not teach or suggest reconfiguration of link circuits. Fung does not teach or suggest reconfiguration of link circuits of ports of multiple links between an origin and a destination. Fung does not teach or suggest transmission of a control signal being indicative of at least one characteristic of the data transmission to configure link circuits of the ports. And, Fung does not teach or suggest transmission of a control signal for the link circuits of the ports.

Zeitler fails to compensate for the inadequacies of Fung. For instance, Zeitler does not teach or suggest power modes for links and Zeitler does not teach or suggest link circuits to reconfigure links in response to a control signal. Thus, Applicant respectfully traverses the rejection of claim 25 and requests that the rejection be withdrawn.

⁷ Zeitler, par. 3.

Dependent Claims

Claims 19-24, 26-35, and 37-41 are dependent upon independent claims 18, 25, and 36. Applicant respectfully traverses the rejections of the independent claims, showing that the independent claims are not obvious in light of the combination of Fung and Zeitler. Because the 35 USC § 103(a) rejections are predicated upon anticipation of claims 18, 25, and 36, Applicant traverses these rejections also. Thus, Applicant respectfully requests that the rejection of the dependent claims be withdrawn and that claims be allowed.

Fung in view of Zeitler in further view of Bui

Dependent Claim 23

With regards to claim 23, the combination of Fung, Zeitler, and Bui U.S. Pat. 7,047,428 (hereinafter “Bui”) does not teach or suggest “...communicating the power mode [to the multiple links to configure circuitry associated with the multiple links] to reduce a gain of a bias circuit.”

As cited in the Office action, Bui describes an integrated circuit that detects when a mode of operation is not being used and puts the associated logic of the integrated circuit to sleep:

When integrated circuit 300 detects that one mode of operation is not being used, it proceeds to put the logic associated with that transceiver to sleep as shown at 402. This may mean decoupling or disconnecting the 10BASE-T functionality, the 100BASE-T functionality or the 1000BASE-T functionality....⁸

However, Bui fails to compensate for the inadequacies of the combination of Fung and Zeitler. Bui does not teach or suggest “...communicating the power mode [to the multiple links to configure circuitry associated with the multiple links] to reduce a gain of a bias circuit.”

Dependent Claims 27-28

With regards to claims 27-28, the combination of Fung, Zeitler, and Bui does not teach or suggest two ports (a first port and a second port) that receive a control signal that configures the first port to operate in a first power mode and the second port to operate in a second power mode.

⁸ Bui, col. 8, lines 13-21.

Dependent Claim 39

With regards to claim 39, the combination of Fung, Zeitler, and Bui does not teach or suggest “a global link circuit... to transmit a control signal to ports... to configure link circuits of the ports.”

Fung in view of Zeitler in further view of Mills

With regards to claims 33, the combination of Fung, Zeitler, and Mills U.S. Pat. 6,795,450 (hereinafter “Mills”) does not teach or suggest two ports (a first port and a second port) that receive a control signal that configures the first port to operate in a first power mode and the second port to operate in a second power mode.

CONCLUSION

Applicant respectfully traverses the claim rejections under 35 USC § 103. Accordingly, Applicant believes that this response constitutes a complete response to each of the issues raised in the Office action. In light of the amendments made herein and the accompanying remarks, Applicant believes that the pending claims are in condition for allowance. Thus, Applicant requests that the rejections be withdrawn, pending claims be allowed, and application advance toward issuance. If the Examiner does not believe that the claims are in condition for allowance or would like to discuss the basis for the drawing amendments in further detail, the undersigned attorney requests a telephone conference at (512) 391-4913.

A request for an extension and the corresponding fee accompany this action. This action also accompanies a request for continued examination with an authorization to pay the corresponding fee. No other fees are believed due with this paper. However, if any fee is determined to be required, the Office is authorized to charge Deposit Account 09-0447 for any such required fee.

Respectfully submitted,

Date: October 4, 2007

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